



PATENT  
Attorney Docket 054800-5015

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

SEP 23 2002

In re Application of: **Roderic Dale et al.**

Application No. **09/408,761**

Group Art Unit: **1631**

Filed: **September 29, 1999**

Examiner: **Marianne Allen**

For: **Methods for Production of Arrays  
with Modified Oligonucleotide and  
Polynucleotide Compositions**

TECH CENTER 1600/2900

AMENDMENT TRANSMITTAL FORM

1. Transmitted herewith is an Amendment Under 37 C.F.R. 1.111 in response to the Office Action dated March 18, 2001.

2. Extension of Time:

The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136(a) apply. Applicants petition for a three-month extension of time from June 18, 2002 to September 18, 2002, the fee for which is set out in 37 C.F.R. 1.17(a). If an additional extension of time is required, please consider this a Petition therefor.

3. Fee Calculation (37 C.F.R. 1.16):

Claims as Amended						
	Remaining		Previously Paid	Extra	Rate	Total Fees
Total Claims	12	-	20	0	\$18 each=	0.00
Independent Claims	1	-	3	0	\$84 each=	0.00
First presentation of Multiple dependent claim					\$280.00	0.00
SUB-TOTAL =						0.00
Reduction by ½ for filing by a small entity						0.00
TOTAL FEE =						0.00

4. Fee Payment:

The Commissioner is hereby authorized to charge **\$460.00** to Deposit Account **50-0310** for payment of the three-month extension of time fee for a small entity.

5. Constructive Petition:

**Except** for issue fees payable under 37 C.F.R. 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **constructive petition for extension of time** in accordance with 37 C.F.R. 1.136(a)(3).

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Page 2

Dated: **September 18, 2002**

Morgan, Lewis & Bockius LLP

Customer No. **09629**

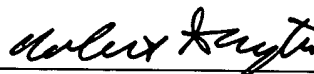
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202-739-3000

Respectfully submitted

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Robert Smyth

Registration No. 50,801



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AMENDMENT UNDER 37 C.F.R. 1.111

In response to the Office Action dated March 18, 2002, the period for response to which has been extended three months from June 18, 2002 to September 18, 2002, please amend the application as follows:

In the Specification:

**Please replace the paragraph beginning on page 2, line 22 through page 3, line 2 with the following paragraph:**

*E1*  
--In one embodiment, the modified associated oligonucleotides and/or polynucleotides of the invention provide additional binding affinity with respect to corresponding, unmodified oligonucleotides having the same sequence. The binding affinity is preferably increased by a modification at the 2' site of the sugar group, *e.g.*, a 2'-F or a 2'-OR modification such as 2'-O-methyl or 2'-O-methoxyethoxy. Alternatively or in combination, the binding affinity can be increased by modification in the 3' linkage group, *e.g.*, phosphoramidate linkages, or a modification replacing the oxygen with a carbon. In yet another embodiment, the modified associated oligonucleotides and/or polynucleotides are characterized by modification of at least 25% of the internucleoside linkages of the oligonucleotide and/or polynucleotide.--

**Please replace the paragraph beginning on page 3, line 3 with the following paragraph:**

*E2*  
--In another embodiment, the modified associated oligonucleotides and/or polynucleotides of the array exhibit substantial acid resistance, allowing the arrays to be treated with low pH solutions. This allows the array to be exposed to low pH in order to remove any bound nucleic acids that are not modified, *e.g.*, bound test nucleic acids. In yet another embodiment, the modified oligonucleotides and/or polynucleotides of the array have a pH stability of at least one hour at 37°C at a pH range of about 0.5 to about 10 including across the pH range of about 0.5 to 6.0.--

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